



**Radio Frequency Identification
Aerospace Alignment Team (RAAT)
DoD Standardization Program Conference
March 14, 2007**

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Strategic Standardization Forum for Aerospace



- Chartered by the CEOs of US aerospace companies
- Neutral forum for all stakeholders in aerospace standards
 - Industry
 - Government (DoD, DoC, NASA, etc.)
 - Regulatory agencies
 - Standards bodies
 - Customers
- **Working to determine the best standards solutions to enhance the development, delivery, management, and utilization of aerospace standards**



SSFA Goals...

- Provide a single point of contact for any organization/activity wanting a US aerospace industry standards position
- Provide the US aerospace industry with a single voice to organizations regarding standards issues
- Foster partnership between public and private organizations

 Enhance coordination of US input into global standards

Promote a global aerospace standards infrastructure

SSFA Objectives...



- Determine industry action or position in response to an external event/issue
- Facilitate requirement definitions for standards products or processes common across the industry and standards organizations



Promote, encourage, and facilitate global standardization



Provide education, awareness and advocacy for standardization across all stakeholders



Provide visibility on current efforts to promote or encourage harmonization and reduce duplication

RFID Aerospace Alignment Team (RAAT) - Origin



- In order to provide visibility on current efforts and to promote harmonization and reduce duplication, the Aerospace and Defense community formed the RFID project team under the SSFA
- The first meeting was held November 29 & 30, 2006 in Washington D.C
- RAAT is open to standards organizations and employees of companies that are working on RFID in the Aerospace and Defense arena
- The initial meeting had the following standards organizations and company representation:

RFID Aerospace Alignment Team (RAAT) - First Meeting



- Standards organizations
 - AIA - Aerospace Industries Assoc. (US)
 - AIAA - American Inst. of Aeronautics and Astronautics
 - AIM Global - Assoc. for Automatic Identification and Mobility
 - ATA - Air Transport Assoc.
 - EPCglobal
 - SAE - Society of Automotive Engineers, Aerospace
 - JTC1/SC31
 - ISO TC184/SC4
 - OASIS PLCS
- Other organizations

RFID Aerospace Alignment Team (RAAT) - First Meeting



- **Employees from the following companies/organizations**
 - Lockheed Martin
 - Pratt Whitney (UTC)
 - The Boeing Company
 - Northrop Grumman
 - LXE Inc.
 - BAE Systems
 - DoD
 - AIT Office
 - Supply Chain Integration
 - Technology Solutions
 - Intelleflex Corporation

RFID Aerospace Alignment Team - Objectives



- Identify major organizations who are actively working on RFID in Aerospace and Defense
- Create a body of knowledge of all relevant standards, guidelines and activities related to RFID in Aerospace and Defense
- Identify RAAT scope
- Create a RFID taxonomy (classification)
- Identify gaps and overlaps
- Establish next steps and invite others to attend

RFID Aerospace Alignment

Team - Scope Defined



Track and Trace - Location of component
Government Furnished Property
Ground Support Equipment
Asset tracking
Raw materials tracking and allocation
Packaging and shipping

Regulatory Compliance
FAA
DoD
EASA
Hazardous materials
Import/Export

Health, Safety and Human factors
Use of RFID to protect and protection from

Part identification – UID, NSN, EPCglobal

Part end of life - Recycle or destroy part?
Expiration date
Chain of custody
Maintenance
Write and update maintenance records
Removal and replacement of parts
Prediction or condition-based maintenance
forecasting
Modification/Refurbishment
Environmental monitoring – using sensors and data loggers for temp, shock, vibration etc.
Configuration management
Rev level of part
Software rev level
Warranty Tracking
Personnel authentication
Reliability data
No fault found
Inventory Control

RFID Aerospace Alignment

Team - Taxonomy



- Hardware - Physical aspects of tags and readers
 - Hardware Infrastructure Management
 - Hardware - Tags
- Air Interface Protocol
- Conformance and Performance Standards
- Data Content - Identifiers, structure, semantics and syntax
 - Data Security
- Application Communication Protocols
- Applications
- Operational Guidance
- Other

RFID Aerospace Alignment Team - Industry Role



Non-Sector Specific

- Hardware - Physical aspects of tags and readers
 - Hardware Infrastructure Management
 - Hardware - Tags
- Air Interface Protocol
- Conformance and Performance Standards

Aerospace and Defense Specific

- Data Content - Identifiers, structure, semantics and syntax
 - Data Security
- Application Communication Protocols
- Applications
- Operational Guidance

RFID Aerospace Alignment Team - Next Steps



- **Circulate meeting minutes and taxonomy widely (standards groups and industry) to create awareness and include more standards organizations (IEEE, IATA, SITA, ARINC)**
- **Share taxonomy within standards groups and industry to identify gaps in information**
- **Request input from groups - comments and corrections on our activities (taxonomy and minutes)**
- **Create RFID standards gap and overlap analysis**

RFID Aerospace Alignment Team - Website Collection



- RAAT information folder located on SSFA website
- Web address:
<http://www.ssf-aerospace.org/>
- Click on “Projects”
- RAAT project is number 008
- Folder will contain:
 - List of standards organizations involved with RFID
 - Contact information for organizations
 - Index of RFID published standards and guidelines
 - Where to obtain copies

RFID Aerospace Alignment Team



Questions?

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